



Minnesota Department of Natural Resources
 Fisheries Management
 STANDARD LAKE SURVEY REPORT



Lake Name: Upper Sakatah

Survey Type: Natural Reproduction Check

DOW Number: 40-0002-00

Survey ID Date: 10/29/2007

Lake Identification

Alternate Lake Name: N/A
 Primary Lake Class ID: 41

DNR Sounding Map Number: C0434
 Alternate Lake Class ID: 41

Lake Location

Primary County: Le Sueur

Nearest Town: Waterville

All Counties: Le Sueur, Rice.

Legal Descriptions

Lake Center: Township - 109N Range - 23W Section - 24
 PLS Section Lake Center: 2658

All Legal Descriptions:

Le Sueur County: Township - 109N Range - 23W Sections - 23, 24, 25, 26, 27
 Rice County: Township - 109N Range - 22W Sections - 19, 30

Area Office

Area Name: Waterville
 Region Name: Southern

ORG Code: F417
 Region Number: 4

Lake Access

(Information based on Re-Survey dated 08/14/1989)

Station ID	Ownership	Public Use	Type	Location / Comments
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(Data excludes records where public use is not designated or is designated "No Public Use")

Lake Characteristics

Lake Area (planimetered acres): 881.00	GIS Shoreline Length (miles): 8.01
GIS Lake Area (acres): 891.99	Maximum Fetch (miles): 2.00
DOW Lake Area (acres): 881.00	Fetch Orientation (degrees): N/A
Littoral Area (acres): 881.00	USGS Quad Map Number: V15a
Area in MN (acres): 891.99	USGS Quad 24K GIS Index: 4230
Maximum Depth (feet): 12.0	
Mean Depth (feet): N/A	

Watershed Characteristics

Major Watershed

Name: Cannon River
 Watershed Number: 39
 Watershed size (acres): 941,122

Minor Watershed

Name: Lower Sakatah L
 Watershed Number: 94
 Watershed size (acres): 5,133

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Surveys And Investigations

Initial Survey: 07/23/1950.

Re-Survey: 08/02/2004, 08/09/1999, 08/01/1994, 08/14/1989, 06/16/1986, 06/12/1981,
06/09/1958.

Special Assessment: 10/19/2006, 10/10/2005, 09/29/2004, 05/26/2004, 10/13/2003, 10/25/2002,
10/18/2001, 10/11/2000, 09/28/1999, 10/15/1998, 10/15/1997, 03/29/1997,
10/09/1996, 10/11/1995, 10/26/1994, 10/06/1993, 10/23/1992, 10/01/1991,
10/18/1990, 10/19/1989, 10/06/1988.

Natural Reproduction Check: 10/29/2007.

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Electrofishing Catch Summary for EF

Standard electrofishing

Total run-time for all stations: 01:00:00
 Total on-time for all stations: 00:52:30
 First Sampling Date: 10/29/2007
 Last Sampling Date: 10/29/2007
 Daylight Flag: No
 Target Species: All juveniles walleye

Abbr	Species	Summary By Numbers			Summary By Weight (Pounds)			
		Total Number	Run-Time	Number per Hour On-Time	Total Weight	Run-Time	Lbs per Hour On-Time	Mean Weight
WAE	Walleye	9	9.00	10.29	1.49	1.49	1.71	0.17

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Length Frequency Distribution For EF

Standard electrofishing

(Field work conducted on 10/29/2007)

	<u>WAE</u>
< 3.00	-
3.00 - 3.49	-
3.50 - 3.99	-
4.00 - 4.49	-
4.50 - 4.99	-
5.00 - 5.49	-
5.50 - 5.99	-
6.00 - 6.49	-
6.50 - 6.99	2
7.00 - 7.49	4
7.50 - 7.99	1
8.00 - 8.49	-
8.50 - 8.99	-
9.00 - 9.49	-
9.50 - 9.99	1
10.00 - 10.49	-
10.50 - 10.99	-
11.00 - 11.49	1
11.50 - 11.99	-
12.00 - 12.99	-
13.00 - 13.99	-
14.00 - 14.99	-
15.00 - 15.99	-
16.00 - 16.99	-
17.00 - 17.99	-
18.00 - 18.99	-
19.00 - 19.99	-
20.00 - 20.99	-
21.00 - 21.99	-
22.00 - 22.99	-
23.00 - 23.99	-
24.00 - 24.99	-
25.00 - 25.99	-
26.00 - 26.99	-
27.00 - 27.99	-
28.00 - 28.99	-
29.00 - 29.99	-
30.00 - 30.99	-
31.00 - 31.99	-
32.00 - 32.99	-
33.00 - 33.99	-
34.00 - 34.99	-
35.00 - 35.99	-
= > 36.00	-

	<u>WAE</u>
Total	9
Min. Length	6.61
Max. Length	11.06
Mean Length	7.94
# Measured	9
No Lengths for	0

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Survey Crew Notes

Field work by Dave Weitzel and Craig Berberich.

Report by Marc Bacigalupi.

Area Signed by user 'huvalian' on 04/03/2008

Field Notes - General Field

High water conditions were occurring during the time of the survey, October 29, 2007. This made electrofishing conditions sub-optimal due to overhanging tree interference with shallow water access. This also prevented the passage of the electrofishing boat between Upper and Lower Sakatah due to the low clearance of the township road 131 bridge.

Discussion

This fall electrofishing survey was conducted as part of a 20-year monitoring of walleye year-classes in the Cannon River chain of lakes in which walleye fry are stocked at 1500 /littoral acre 3 out of 4 years.

In most years, walleye fry stocking appears to be the most effective way to establish a year-class. 2007 was a non-stocked year. Therefore, the catch of 0 young-of-the-year (YOY) walleye per hour of electrofishing is not unexpected. In 5 of the 7 non-stocked years since 1987 the catch rate of YOY walleyes in upper Sakatah is 0. A notable exception occurred in 2001 when significant walleye natural reproduction occurred in the Cannon River chain of lakes and 173 /hr were captured. The average catch rate in the 14 stocked years since 1987 is 29 with a standard error of 6.0.

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Status Of The Fishery

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Approval Dates And Notices

H. Valian b

Date Approved By Waterville Area Fisheries Supervisor: 04/03/2008

Date Approved By Southern Region Fisheries Manager: *JR*

4/30/2008

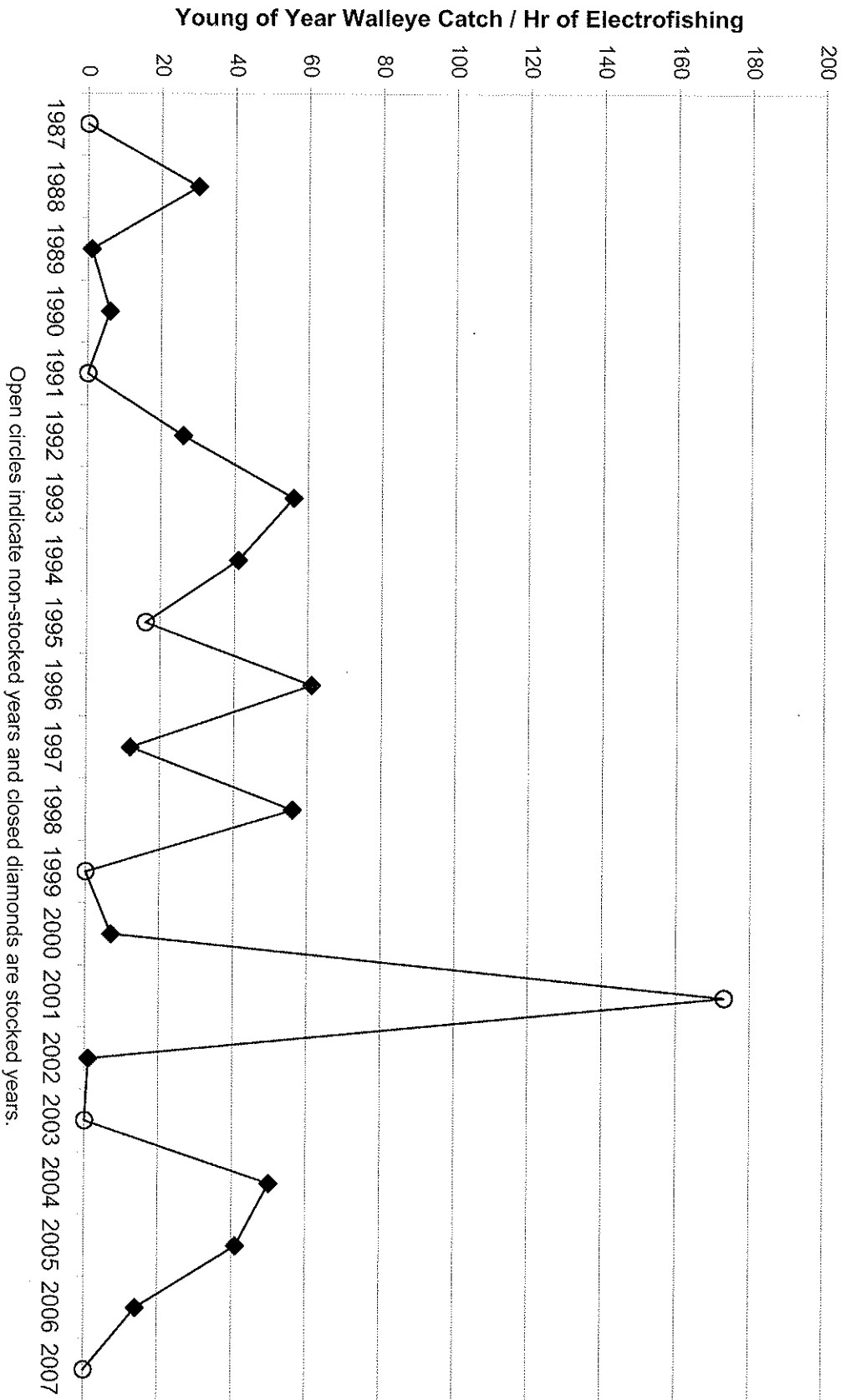


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UPPER SAKATAH



Cannon River Chain of Lakes

